

REMARKS

Claims 1, 3-4 and 10 have been amended, claim 11 has been canceled without prejudice and new dependent claim 16 has been added. Claims 1-10 and 12-16 are presently pending.

A replacement drawing FIG. 1 has been submitted in response to the Examiner's objections to the drawings.

The specification has been amended to state that application Serial No. 09/290,353, from which the subject application claims priority, has been abandoned.

Also enclosed is a revised first page of the oath/declaration including the correct priority data concerning Serial No. 09/290,353.

In view of such amendments and the following remarks, reconsideration and allowance of the claims, as presently presented, are respectfully requested.

EXAMINER'S ACTION

The 35 U.S.C. § 102 Rejections

Claims 1-3, 7, 10 and 14-15 were rejected as being unpatentable under 35 U.S.C. § 102(e) based on U.S. Patent No. 6,259,673 ("Yoshihara et al."). Claims 1 and 3 have been amended to clarify what is the claimed invention and include the limitations of claim 11, which has been canceled. Claims 1-3, 7, 10 and 14-15, as amended, and new claim 16, which depends from claim 1, are clearly patentable over Yoshihara et al. for the reasons set forth below.

Claim 1 is directed to a method for transmitting data between nodes on a powerline network which includes the step of selecting a communication path, where the selecting involves "examining throughput values stored at a first one of the plurality of nodes on the powerline network from which a link is to be established to a second

one of a plurality of nodes." Claim 1 further requires that "examining of the throughput values comprises determining an optimum size of a data packet for transmitting data between the first and second nodes" and that the throughput values indicate the reliability of a communication path between the first node and the second node on the powerline network. (See specification at page 5, lines 11-12, page 6, lines 1-4).

Yoshihara et al., in contrast to claim 1, concerns route selection on a network where the considerations for route selection are not the same as, and are unrelated to, those that must be evaluated for route selection on a powerline network. In Yoshihara et al. route selection is performed based on the assumption that data packets of fixed length are used to transmit data on the network, whereas in the claimed invention data packet size is optimized as part of route selection for the powerline network. In addition, Yoshihara et al. concerns a network comprising a virtual (logic) network that overlays a physical network of switches. Route selection in the overlayed network structure of Yoshihara et al. does not include the same considerations for route selection as existing in the purely physical network of a powerline environment. For example, route selection in the powerline network involves selection of an appropriate communication protocol, where the selection of the protocol depends upon the physical condition of network segments in the powerline network. Thus, Yoshihara et al. nowhere teaches or suggests route selection for a powerline network as required by claim 1.

Accordingly, claim 1 is patentable over Yoshihara et al.

Claim 3, which is directed to a method for transmitting a signal on a powerline network and also requires the step of determining an optimum size of a data packet for transmitting data between the first and second nodes on the powerline network, also is

patentable over Yoshihara et al. for the same reasons that claim 1 is patentable as set forth above.

In addition, claim 2, which depends from claim 1, and claims 7, 10 and 14-15 which depend from claim 3, are also patentable over Yoshihara et al. for the same reasons that claims 1 and 3 are patentable, as set forth above, and because of the additional restrictions they add.

Further, new dependent claim 16, which depends from claim 1 and recites that the selecting a communication path further comprises examining a throughput value representative of a current condition of a link of the powerline network, also is patentable over Yoshihara et al. for the same reasons that claim 1 is patentable and because of the further restrictions it adds. Support for new claim 16 is found in the specification at, for example, page 3, lines 1-5. Yoshihara et al. nowhere recognizes or considers that characteristics of segments of a network are "changing" over time, such as can occur in a powerline environment where attenuation of signals along the path varies over time and powerline environment noise, such as quasi-steady state background noise, narrowband noise and bursty noise, can change over time and with different frequency over time. Therefore, Yoshihara et al. does not provide the motivation to one of skill in the art to examine current line conditions of a link of a powerline network for selecting a communication path, in view of the fact that the current conditions can affect which communication protocol should be selected.

Accordingly, it is respectfully requested that the Section 102 rejections of the claims be withdrawn.

The 35 U.S.C. § 103 Rejections

The Examiner rejected claims 4-6, 8-9 and 11-13 as being unpatentable under 35 U.S.C. § 103 based on Yoshihara et al. in view of U.S. Patent No. 6,647,008 ("Galand et al."), U.S. Patent No. 6,141,388 ("Servais et al."), U.S. Patent No. 5,553,072 ("Daggett et al.") or U.S. Patent No. 6,397,368 ("Yonge, III et al.").

Yonge, III et al., which has a filing date of December 6, 1999, is not prior art for the subject application. The subject matter recited in the pending claims finds support in Application Serial No. 09/290,353 filed April 12, 1999, which the subject application claims the benefit of priority. Consequently, Yonge III et al. is not prior art with respect to the pending claims.

None of the references Galand et al., Servais et al. and Daggett et al., which are relied upon by the Examiner for the obviousness rejections, alone or in combination with the primary reference Yoshihara et al., cure the deficiencies of Yoshihara et al. concerning the lack of a teaching or suggestion of selecting a route for a powerline network by examining throughput values, where the examining comprises determining an optimum size of a data packet for transmitting data between first and second nodes on the powerline network.

Accordingly, claims 4-6, 8-9 and 11-13, which depend from claims 1 or 3, are allowable for the same reasons that claims 1 and 3 are allowable, as set forth above, and because of the further restrictions that they add.

Therefore, it is respectfully submitted that the Section 103 rejections should be withdrawn.


CONCLUSION

For the foregoing reasons, it is believed that all of the claims, as presently presented, are patentable.

The Examiner is invited to telephone the undersigned if it is believed that further amendment and/or discussion would help to advance the prosecution of the present application.

Reconsideration and allowance of claims 1-10 and 12-16 are, therefore, respectfully requested.

Respectfully submitted,


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